CHAPTER III

DEPT. OF ECONOMIC DEVELOPMENT MINIMUM HOUSING QUALITY STANDARDS (DED HQS)

General Information

These guidelines for the rehabilitation of existing residential properties have been developed to provide minimum design and construction criteria on a statewide basis. The provisions are intended to serve as an important aid in carrying out the objectives of State and local programs for neglected and run-down properties. These objectives seek the large-scale physical, social, and economic regeneration of neighborhoods, which are seriously deteriorated. **These Housing Quality Standards are divided into two parts: health and safety standards and livability standards.**

All housing units receiving CDBG assistance target area project must comply with both the livability and the health and safety standards. In a scattered site housing rehabilitation project, a substantial rehabilitation or a homeownership financing activity 100% of funds must be expended on units that meet DED livability standard. For a targeted area project, only 80% of funds need to be expended on houses meeting the livability standards.

The purpose and intent of the guidelines are threefold:

- 1) To assure improved housing that is livable, healthful, safe, physically sound, and at the same time is affordable to LMI households in the target area;
- 2) To provide an acceptable minimum level residential rehabilitation based on quality work and timely performance, which is implemented in a flexible manner to meet local conditions; and
- 3) To encourage innovation and improved technology that give promise to reducing construction costs.

Contrast with New Construction Standards

These guidelines for rehabilitation are significantly different from standards for new construction. These homes were built many years ago by standards which were quite different from practices today. Former patterns of living and the use of space are now likely to be considered inefficient or inconvenient. Properties, in many cases, will have become substandard because of overcrowding, lack of funds by the owner to rehabilitate the unit, lack of enforcement of building codes or property maintenance ordinances, or general neglect. Thus, flexibility to meet local conditions has been made a primary element of these guidelines.

Local Codes and Regulations

These guidelines, while setting forth basic objectives and provisions specifically related to rehabilitation, shall not be construed as relieving the property owner, project sponsor, or their builder of their responsibility for compliance with local and state ordinances, codes and regulations, including pertinent requirements of a health authority having jurisdiction. Where a local code, regulation, or requirement is incomplete or does not fulfill the purpose and intent to these guidelines, DED HQS standards shall apply.

HEALTH AND SAFETY STANDARDS

Introduction: The following health and safety standards apply to 100% of the units rehabilitated with grant funds from the CDBG rehabilitation line item in the funding approval. A minimum of 20% of the units may be rehabilitated solely to the health and safety standards and the remaining 80% must be to both DED livability and health and safety standards. In this chapter, the health and safety HQS standards will be presented first, followed by the livability HQS standards.

UTILITIES

Utilities shall be provided for each property or project, including water, sewer, and electrical utilities. Approved utilities include:

- 1) State, city, PWSD, or county approved supplied water, sewer, electrical, and gas utilities;
- 2) Privately owned water, sewer, electrical, and gas utilities that have been approved by state and local agencies for use for residential dwellings;
- 3) For structures connected to an on-site water well, water must be tested:
 - a) and meet water quality standards for drinking water as required by the Missouri Department of Natural Resources; or
 - b) water supply must be connected to on-site package disinfecting facilities and water must not contain toxic substances determined, in the concentrations, determined to be harmful to human health by the Missouri Department of Natural Resources or the Environmental Protection Agency.
- 4) For structures connected to existing on-site septic systems, grantees shall ensure that the design of the system is not discharging effluent from the septic system and disposal field into public and private drinking water supplies, stagnating in pools on the surface, or backing up into the residences. For septic systems installed, grantees are required to obtain permit from the Missouri Department of Health. Construction specifications shall follow guidelines established by the Missouri Department of Health (See 19 CSR 20-3.015).
- 5) For structures connected to on-site propane tanks, propane lines connecting the tank to the building shall conform to BOCA codes.

6) Structures connected to gas, propane, water, electrical, or sewer utilities shall be connected with piping or conduit that is not corroded, does not leak, or are otherwise not allowed by these standards. Bare steel gas lines must be inspected for safety by a local gas company and repaired, if necessary. The inspection report must be in each file.

STRUCTURAL

All floors, stairs, ceilings, or other load bearing structural members shall be free of hazards that would indicate a potential for the building or individual members of the building to collapse.

ROOFS

Roofs shall be repaired or replaced if they have serious defects indicating the potential for structural collapse or if they allow the infiltration of water. If addressed, all critical joints in exterior roof construction shall be protected by appropriately installed sheet metal flashing material or rubberized roofing membrane.

WEATHERIZATION – PIPING

All water pipes in non-insulated spaces shall be insulated to keep them from freezing. Water pipes in exterior walls shall be insulated as necessary to keep them from freezing. All foundation and manufactured home crawl spaces shall be enclosed to prevent pipes from freezing in the winter. Pipes shall not be insulated with asbestos material. All asbestos insulating material shall be replaced with non-asbestos material or encapsulated with high-temperature paint or other EPA approved material.

LEAD-BASED PAINT

- 1) <u>Disturbing Lead Painted Surfaces:</u> For all homes built before 1978, any surface that will be significantly disturbed during the course of rehabilitation activities must be tested for lead content. Significant disruption is defined by the following activities:
 - a) Removing paint by chipping, sanding, mechanical means including abrasive blasting or water blasting from doors;
 - b) Interior wall or ceiling repair or demolition of more than 2 sq. ft. in each room, or exterior wall repair or demolition of more than 10 sq. ft.;
 - c) Replacing doors and window units from the interior of the dwelling;
 - d) Major replacement or modifications of HVAC, plumbing, or electrical with more than incidental surface disruption.

If lead is found, contractors must be advised to comply with OSHA requirements at 29 CFR Part 1926 in conducting these activities. The lead risk assessor must assist the contractor and rehabilitation inspector in preparing a work write-up that will protect the rehabilitation workers.

Contractors are required by HUD to use safe work practices during the course of any renovation and remodeling projects disturbing painted surfaces. HUD prohibits the following methods of paint removal under 24, CFR Part 35.140:

- a) Open flame burning or torching
- b) Machine sanding or grinding without a high-efficiency particulate air (HEPA) local exhaust control
- c) Abrasive blasting or sandblasting without HEPA local exhaust control
- d) Heat guns operating above 1100 degrees Fahrenheit or charring the paint
- e) Dry sanding or dry scraping, except dry scraping in conjunction with heat guns or within 1.0 ft. of electric outlets, or when treating defective paint spots totaling no more than 2 sq. ft. in one interior room or space, or totaling no more than 20 sq. ft. on exterior surfaces
- f) Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with the regulations of the Consumer Product Safety Commission at 16 CFR 1500.3 and/or other hazardous chemical in accordance with the Occupational Safety and Health Administration regulations at 29 CFR 1910.1200 or 1926.59, as applicable to the work

In addition, the grantee must ensure that occupant protection plans are included in the rehabilitation work specifications

- 2) <u>Houses with Lead Hazards Identified by a Licensed Risk Assessor:</u> In those houses where a licensed risk assessor has identified immediate hazards caused by defective paint surfaces or bare soil on the property, those immediate hazards must be reduced using one of the following methods:
 - a) Hazards that will be addressed as the part of rehabilitation and remodeling procedures used to eliminate other HQS deficiencies identified in this Chapter can be removed using procedures identified in Section "a" above and in Chapter V. Clearance standards as indicated in protocol identified by the Missouri Department of Health must be met.
 - b) A licensed lead abatement contractor shall be hired to conduct the following allowed activities defined as abatement by the Missouri Department of Health. DOH protocol must be followed when conducting lead abatement activities.
 - c) Interim controls, as defined by the Missouri Department of Health, will **not** require a licensed contractor. Clearance standards as defined by the Missouri Department of Health must be met. Interim Control activities include activities that will temporarily eliminate lead based paint hazards, including, but not limited to:
 - Specialized cleaning.
 - Surface coating stabilization. This would include the following:

- Wet scraping deteriorated paint surfaces that are not classified as being in poor condition (See Chapter V for definition of "poor.")
- Application of paint or encapsulants that have a lifetime rating of less than 20 years, even if applied over surfaces that were in poor condition and have been wet scraped by a licensed supervisor/worker.
- Replacement of window and door <u>components</u> to eliminate friction surfaces, but not the entire window or door unit. This could include rehanging or planing doors, removal and replacement or doorstops, and installing non-lead window components.
- Providing surface coatings on stairs and floors, such as carpet, tile, and sheet flooring without removing painted surfaces.
- Temporary covering of soils with landscaping materials, such as grass, rocks, mulch, etc.
- Using barriers to prevent entry to hazardous areas, such as fencing, door-locks, and relocation of occupant, warning signs, and barrier landscaping.

In all cases where interim controls are completed, an occupant protection plan must be provided to the property owner along with a schedule for reevaluating the condition of paint in the future. All interim controls shall be completed in accordance with HUD's Guidelines for the Evaluation and Control of Lead-Based Paint in Housing.

HEATING APPLIANCES

All mechanical equipment shall be checked for faulty operation, fire, and other hazards. For gas appliances, the inspection shall include the following:

- 1) Check gas supply line for material soundness, exposure to damage, leaks, shut-off valve, and dirt-leg;
- 2) Check burning, flame color, pilot adjustment or ignition efficiency;
- 3) Check venting to ensure that flues are not clogged and do not leak;
- 4) Perform carbon monoxide test.

The inspector conducting these tests must perform the <u>carbon monoxide test</u> using a CO tester. A certification must be placed in the file by the inspector indicating that the equipment has been tested for the above items and is safe to operate at the time the inspection was conducted. If hazards are found, repairs and replacement shall be made as needed and necessary to eliminate the hazard. Heating facilities shall be provided for each living unit. All new installations of heating appliances shall comply with the manufacturer recommendations for installation and placement. All gas, propane, liquid, and solid fuel burning appliances must be vented to the outer air.

Existing masonry chimneys or metal flues shall not have cracks or holes, which permit smoke or fumes to be discharged. Deteriorated pipes or chimneys that have been determined by the

grantee's inspector to constitute a potential threat to the safety of the occupant shall be replaced. Existing unlined masonry chimneys which permit flames or fumes to be discharged should be removed and replaced with corrosion-resistant pipe, or if not replaced shall be lined with corrosion-resistant pipe one inch less in diameter than the interior of the chimney, or shall be lined with terra cotta. **Vent pipes shall slope upward not less than ½ " per foot**.

Any asbestos-containing materials wrapped around vent pipes shall be removed or encapsulated with high temperature paint. Asbestos removal procedures shall comply with the Missouri Department of Natural Resources/EPA regulations. Please consult with DNR's Air Pollution Control Program for compliance requirements at 573/751-4817.

All heating appliances shall be located in unconfined spaces that will provide adequate combustion air as recommended by the manufacturer of the appliances. If located in a confined space, adequate ventilation between the confined area and unconfined space shall be provided to allow adequate combustion air to enter the confined space.

SOLID FUEL BURNING APPLIANCES

All existing chimneys and vents for solid fuel burning appliances shall be cleaned as part of the rehabilitation process. All chimneys and vents for solid fuel burning appliances shall terminate at least two feet above any part of the roof and any roof ridge located horizontally with ten feet of the chimney or vent.

- 1) Metal Flues: Solid fuel burning appliances (wood, coal, etc.) shall be vented so that single walled pipe shall have at least 16" clearance from combustible material; (2) double walled pipe shall have at least 8" clearance from combustible material; and (3) triple walled pipe shall have at least 2" clearance from combustible material. Double walled insulated stainless steel pipe shall have at least 3" clearance from combustible material. All pipes venting solid fuel burning appliances shall have been approved by Underwriters Laboratories to withstand heat of 1,500 degrees or more for three hours. All galvanized pipe shall be of #10 thickness or of superior fire resistance.
- 2) <u>Masonry Chimneys</u>: Existing masonry chimneys being used to vent solid fuel burning appliances shall be constructed of at least 8" of solid masonry around the vent below the roofline and 4" of solid masonry around the vent above the roofline. Combustible material above the roofline shall have at least 2" clearance from a flue built of less than 8" of solid masonry. All such chimneys shall be lined with terra cotta or firebrick.
- 3) Placement: Solid fuel burning heaters shall not be placed within 36" of any unprotected walls or within 18" of an unprotected floor. Protection of walls and floors may be provided with or without ventilated spaces between the protection and the wall. Ventilated spaces shall consist of a one-inch space between a listed noncombustible material and the wall. Spacers and ties between the material and the wall shall be noncombustible and shall be resistant to heat conduction. Spacers shall not be placed between the appliance and the wall. With wall protection and a ventilated space, clearance between the appliance and the wall may not be less than 12". With wall protection and no ventilated space, clearance between the appliance and wall may be not less than 24" unless more than 4" of solid masonry is used as the protection.

PLUMBING

Plumbing systems shall operate free of clogging and shall not have cross connections that permit the contamination of water supplies or back siphoning between fixtures.

- 1) Water and sewer lines shall be free of major leaks that cause serious and persistent levels of rust or contamination of the water, or which damage other elements of the building. All water lines in unheated areas shall be insulated to keep them from freezing.
- 2) All natural and liquid propane gas piping shall be free of leaks. Pipes feeding each individual gas fueled appliance shall have a shut-off valve. Gas lines shall be free of corrosion that potentially could cause a gas leak. Soft copper piping and other non-rigid piping shall not be used in replacing and installing <u>natural gas lines</u>. Soft copper piping used in installing or replacing <u>propane gas lines</u> shall not be located in areas where it is accessible to tampering by children or located in passageways where it can be potentially kicked, stepped on, bent, or dipped so as to cause leakage of gas around flange connections.

ELECTRICAL

Existing wiring and electrical equipment, where its continued service is contemplated, shall not be a potential source of electrical hazard or ignition of combustible materials. Wherever potential hazards are determined to be present after the HQS inspection, then replacement of existing wiring or equipment shall be made. Existing electrical facilities that are inadequate to meet the anticipated demand of the structure shall be upgraded to meet that demand. Hazards such as broken wiring, non-insulated wiring, frayed wiring, a light fixture hanging from an electrical wire with no other visible means of support, missing cover plates on switches, outlets, and junction boxes exposed to the occupants of the dwelling or which are covered with combustible material, knob and tube, aluminum or other obsolete wiring systems, badly corroded outlets, exposed fuse box connections, and overloaded circuits evidenced by frequently blown fuses, shall be eliminated and replaced.

New electrical work shall be installed using the appropriate provisions of the National Electrical Code as it has existed within the last ten years. At the minimum, not less than two general lighting circuits (15 amp.) and one appliance circuit (20 amp.) shall be provided, but 100 amp service is recommended.

BATHROOM

<u>Commode</u>: Bathrooms must have a working commode for the exclusive use of the occupant. The commode must be connected to a water supply and sewer. The commode must not leak, have clogged water lines, or have a sewer line that is clogged or backs up.

<u>Lavatory</u>: Bathrooms must have a fixed wash basin or lavatory that is permanently and securely fastened to the wall. The lavatory must be equipped with hot and cold running water and have a working drain with a gas trap.

<u>Bathtubs and Showers</u>: Bathrooms must be equipped with a working tub or shower with hot and cold running water and have a working drain with a gas trap.

TERMITE TREATMENT

Chemicals applied as a termite treatment shall only be applied to a house by a person that is a licensed commercial applicator. Persons who are licensed shall not assign persons who are not licensed responsibility for treating a house. Grantees shall keep documentation showing that the person chosen to undertake termite treatment is a licensed applicator. Use of chlordane has been banned by EPA/DNR; therefore, it is also not allowed on DED-funded rehabilitation projects.

MATERIALS

All materials shall be installed in locations and for purposes that are recommended by the manufacturer of the materials. Materials must be installed using methods that will not void the warranty of any product.

OVERCROWDING

At the minimum, there must be an adequate sleeping room for every two persons living full time in the household, with it own entry. No non-spousal person of different gender may be required to share a sleeping room if both persons are 6 years of age or older, under CDBG's HQS standards.

LIVABILITY STANDARDS

The following livability standards apply to 80% of funds for units rehabilitated with CDBG funds. These standards include all of the provisions listed in the "Health and Safety Standards," and all of the provisions listed under this section, the livability standards.

ACCESS TO THE UNIT

- 1) Where access to the structure is outdoors and it is more than 12" above grade, steps shall be provided for all-weather access to the building and constructed to provide safety and reasonable durability.
- 2) Where access to the unit is on the interior of the structure, each unit shall not have its only access through one of the other units.
- 3) Accessibility To Accommodate Physical Disabilities: If physically disabled handicapped or elderly persons with limited mobility is present, the exterior must provide for handicapped accessibility for street or parking areas to the interior of the structure. Examples include: sidewalk or ramp no more than a 1-inch to 1-foot rise in slope from street or parking to the point of entry. Railings along sidewalk or ramp, door thresholds flush with internal and external entry/egress surface. Door handles that can be pulled rather than turned.

DILAPIDATED ELEMENTS

Remove all dilapidated portions of existing properties which are not economically repairable or which are not of historic significance. If they pose a potential safety hazard to the occupants of the dwelling, they shall be removed from the structure.

GARBAGE AND DEBRIS

All debris, junk, inoperable vehicles and appliances, and dilapidated structures on the exterior of the property shall be removed to a legally acceptable location outside of the neighborhood prior to the initiation of rehabilitation.

The household shall be responsible the removal of junk and debris that they are able to accomplish. The grantee may achieve compliance with this guideline by organizing community-wide clean up efforts. Grant funds may be used to dispose of large appliances or other heavy objects.

SPACE STANDARDS

Each living unit shall be provided with space necessary for suitable sleeping, cooking, dining, storage, and sanitary facilities and provide space of such size and dimensions so as to permit placement of furniture and essential equipment. There shall be at least one bedroom, a kitchen, living room, and bathroom. Minimum sizes for these rooms are as follows:

Room	Space	Least Dimension
Living Room	120 sq. ft.	8 ft.
Bedroom	70 sq. ft.	6 ft.
Bathroom	24 sq. ft.	4 ft.
Kitchen	30 sq. ft.	5 ft.
Total area required:		400 sq. ft.
Minimum average ceiling height for all rooms:		7' 0"

LIGHT AND VENTILATION

<u>Ventilation</u>: Natural ventilation of spaces, such as attics, enclosed basements, and crawl spaces, shall be provided by openings of sufficient sizes to overcome dampness and minimize the effect of conditions conducive to decay and deterioration of the structure, and to prevent excess heat in attics. This provision may be waived in cases of basement areas that are not subject to regular use where moisture infiltration is not a problem. Exterior ventilation openings shall be effectively screened where needed.

<u>Ventilation of Utility Spaces</u>: Utility spaces which contain solid, liquid, or gas-burning, heat-producing or air conditioning equipment shall be ventilated to allow adequate combustion air.

<u>Windows</u>: There shall be at least one operable window in the living room and bedrooms. Kitchens and bathrooms not having an operable window shall have a working ventilation system.

DOORS AND ACCESS OPENINGS

Exterior doors: Exterior doors installed with use of CDBG funds shall have safe locks.

<u>Stairways</u>: All stairways shall provide for safety of ascent and descent and shall be equipped with handrails at an appropriate height for the owner of the residence. Risers shall not be more

than 12" in height and not less than 10" in width unless the existing construction makes the installation of risers less than 12" in height impossible.

STRUCTURAL COMPONENTS

All structural components of the building shall be in sound condition and considered serviceable for the expected useful life of the rehabilitated buildings. Individual structural members in seriously deteriorated condition shall be replaced.

<u>Ceilings</u>: Ceilings shall not have large cracks or holes that allow significant entry of air into the unit. Ceilings shall not be buckling or bulging, have missing parts or have loose surface materials other than paper.

<u>Interior Wall Conditions:</u> Interior walls shall not have loose structural members, large holes, or allow the significant infiltration of air or water into the structure.

<u>Floor Conditions</u>: Floors shall not have threats to safety (e.g., tripping) or large cracks or holes that allow substantial drafts to enter the structure. Floors shall not significantly move under walking stress and shall not have damaged or missing parts such as: floor joists, band joists, plates, and sub-flooring.

<u>Foundations</u>: Foundations shall provide for the adequate support of structural members and loads placed upon them. Foundations shall prevent the entrance of water or excessive moisture. Serious defects shall be repaired and cracks effectively sealed. Foundation walls shall not allow the significant entry of ground water. "Significant" means that the majority of the basement floor or crawl space area is covered with ground water. Any new footings installed shall provide for subsurface drainage away from the foundation.

<u>Drainage</u>: Any deficiencies in proper grading, guttering, or paving adjacent to the building shall be corrected to assure surface drainage away from the basement or crawl space.

<u>Exterior Walls</u>: Exterior walls shall provide safe and adequate support for all loads placed upon them and shall prevent the excessive infiltration of air or moisture. Serious defects shall be repaired and cracks effectively sealed.

<u>Roofs</u>: All roofs shall have suitable watertight and reasonably durable covering free of holes, cracks, excessively worn surfaces, or other defects that would indicate the potential for significant infiltration of air, water, or excessive moisture. If gutters, soffits, fascia, or other elements allow the significant entry of water or air into the structure, they shall be replaced to eliminate this problem. If an existing roof shows the potential for water infiltration within the next five-year period, the roof must be inspected and either repaired or replaced.

WEATHERIZATION

All houses shall be equipped with the following weatherizing improvements:

1) Windows

All windows shall be equipped with two layers of glass (storm windows count as one layer) and glass panes shall be intact. Windows shall not allow the significant entry of air or water

into the structure from around the windows sashes or window casings. Window casings that are replaced shall be filled with insulation.

2) Doors

All exterior doors shall be weather-stripped. Weather-stripped doors that allow the significant entry or air or water into the structure shall be replaced or repaired to eliminate this problem. The grantee may provide storm doors as a weatherization measure.

3) Ceiling Insulation

Ceiling insulation shall be provided over all habitable areas. Combustible materials, such as beadboard or Styrofoam, shall not be used for ceiling insulation. All ceilings shall be insulated to at least R-19 or as can be determined for a particular structure using HUD's Cost Effective Energy Conservation Standards for rehabilitation projects, which may be requested from HUD.

4) Side Wall Insulation

All side walls shall be insulated to R-11 or better or as can be determined for a particular structure using HUD's Cost Effective Energy Conservation Standards for Rehabilitation projects. Walls in spaces heated with solid fuel burning heating appliances are exempt from this requirement. Side-wall insulation shall not be installed using beadboard, Styrofoam or other combustible materials. When exterior walls are repaired by removing existing sheathing or interior wall covering, insulation shall be provided to the exposed portion of the wall cavity. A vapor barrier shall be provided on the warm side of the cavity or furring when insulation is added.

KITCHENS AND BATHS

<u>Kitchens</u> must be supplied with a sink that has hot and cold running water. Sinks should have a working drain with a gas trap and must be securely fastened to the wall. Kitchens must have a stove or a range with an oven. Top burners and oven must be operable. A refrigerator must be present and working, and it must maintain a temperature low enough so that food does not spoil over a reasonable period of time.

<u>Bathrooms:</u> Bathtub and shower bases shall be appropriately sealed to prevent water from damaging the floor. Bathroom floors in houses with children under 10 years shall be covered with a waterproof covering. Showers or tubs installed in houses for the elderly and handicapped shall be provided with two grab bars installed to sustain a dead weight of 250 pounds for five minutes. Tub or shower bottom surfaces shall be slip resistant. Shower enclosure areas shall be tiled or covered with a waterproof surface from the floor to five feet above the floor. Barriers shall exist between all drains and a water supply on bathroom fixtures to ensure that wastewater does not flood water supply systems.

PLUMBING

<u>Domestic Hot Water Heating and Storage</u>: Each building or unit within the building shall have domestic hot water in quantities sufficient for the needs of the occupants. Existing water heating

and storage equipment shall be in good serviceable condition. Water heaters shall not be installed in rooms designed and used for sleeping purposes. All fuel burning water heaters shall be connected to a vent leading to the exterior of the building. As required by Section B(5)ii for the venting of heating equipment, vents shall not have cracks or holes that allow fumes to be discharged. All water heaters shall have a shutoff valve on the water supply line close to the heater. All water heaters shall have a temperature/pressure relief valve, and discharge pipe.

<u>Water and Sewer Lines</u>: All water and sewer lines that have the potential for major leaks that could cause serious and persistent levels of rust or contamination of the water or which potentially could damage other elements of the building should be replaced. Sewer lines servicing a building shall be equipped with a clean-out screw. Building wastewater systems shall be appropriately vented to the outside air to prevent the buildup of gases in the sewer lines. When using DED funding, all water supply lines feeding toilets, sinks, showers, lavatories, hot water heaters, and other plumbing fixtures shall be installed with shutoff valves. All lead water and waste disposal lines shall be replaced with non-lead material. Lead-based solder shall not be used to connect copper water supply lines. Gas traps must be provided for washing machine waste disposal lines.

MECHANICAL

<u>Heating facilities</u> shall be provided for each living unit that are safe to operate, economical to operate, and are free from objectionable drafts. Each heating system shall be capable of maintaining a temperature of at least 75 degrees F within the kitchen, bedrooms, dining room, living room, and bathrooms. Flue connections shall not allow exhaust gases to enter the living areas. Fuel tanks shall not be in close proximity to heat sources. Combustible materials shall not be stored in close proximity to the heat sources and flues.

<u>Electric baseboard heating</u> shall not be installed unless it is justified by rehab replacement and utility cost efficiency, is acceptable to the occupants, and is easily turned off and on by the occupants.

ELECTRICAL

All habitable rooms and other spaces requiring electrical service shall be provided with a system of wiring, wiring devices and equipment to safely provide electrical energy for proper illumination, appliances, resident security, and other electrical equipment.

There shall be at least two working outlets or one working outlet and one light switch in kitchens, corridors, bathrooms, bedrooms, utility rooms, and living rooms. At least 100 amps. service shall be provided for the houses that have 220 volt receptacles.

MANUFACTURED HOMES

Mobile homes shall be securely anchored to the ground. Mobile homes shall have a permanent utility hookup. **Mobile homes made prior to January 1, 1977 cannot be rehabilitated.** If a grantee spend CDBG funds to rehabilitate a pre-1977 manufactured home, the grantee will be required to reimburse the state for the amount of the CDBG rehabilitation costs.

SMOKE DETECTORS

All units shall be equipped with at least one hard-wired operating smoke detector equipped with a battery back up, that is located near the sleeping quarters.

APPLIANCES

The purchase of appliances that are not permanently affixed to the house is <u>not</u> an eligible cost. However, the purchase of stoves, refrigerators, hot water heaters, and space heating equipment <u>are permissible to replaced nonfunctioning or poorly functioning appliances</u>. Grantees must follow the small purchases procurement procedures when acquiring these items.

Where air conditioning does not exist in a unit that is being rehabilitated, it may <u>only</u> be added to the work write-up to address the documented health need of the occupant. A doctor's statement is required to document the need for the air conditioning unit. Air conditioning may also be provided when the occupant is elderly, age 62 and over. Window air conditioning units are <u>not</u> an eligible rehab item for the program. Otherwise, air conditioning may only be added when the owner pays for that costs of the rehabilitation contract.